



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Coronavirus Disease 2019 (COVID-19)



Toolkit: One Health Approach to Address Companion Animals with SARS-CoV-2

Updated Nov. 5, 2020

[Print](#)

Disclaimer: This is a rapidly evolving situation and information will be updated as it becomes available.

Who this is for: Public health and animal health officials involved in managing companion animals diagnosed with SARS-CoV-2 and other One Health partners.

Scenarios included on this page

Preparing & Planning for Test-Positive Animals

[Toolkit checklist and guide](#)

[Prepare for SARS-CoV-2 test-positive companion animals](#)

[Establish flow of information](#)

[Establish a plan with the treating veterinarian for SARS-CoV-2 test-positive companion animals](#)

Managing Test-Positive Animals

[When a SARS-CoV-2 test-positive companion animal requires hospitalization or in-patient care](#)

[Treating a sick, SARS-CoV-2 test-positive animal](#)

[When a SARS-CoV-2 test-positive animal can be isolated at home](#)

[Repeat testing of a SARS-CoV-2 test-positive companion animal](#)

End Management of Test-Positive Animals

[When to resume normal activities with a SARS-CoV-2 test-positive companion animal](#)

[Epidemiological investigation of SARS-CoV-2 test-positive companion animals](#)

Purpose

This toolkit provides recommendations for public health and animal health officials involved in managing companion animals diagnosed with SARS-CoV-2, including those that require hospitalization and those that may be isolated or monitored at home. States or other jurisdictions may have their own specific requirements for these circumstances.

The primary means of people becoming infected with SARS-CoV-2, the virus that causes coronavirus disease 2019 (COVID-19), is through [person-to-person spread](#). Based on limited data available, the risk of animals, including pets, of spreading SARS-CoV-2 to people is considered to be low. However, in the event a companion animal tests positive for SARS-CoV-2, state, local and federal public health and animal health partners should be prepared to take additional steps to mitigate potential risks associated with exposure to these animals.

Preparing a public health response to the diagnosis of SARS-CoV-2 in a companion animal will involve drafting policies and protocols, assessing resources, and engaging partners at all levels (e.g., public health agencies, animal health agencies, animal services, local government and legal authorities, and other relevant partners). Public health and animal health officials should collaborate using a [One Health](#) approach to investigate companion animals with SARS-CoV-2 infection while keeping personnel safe. The CDC COVID-19 One Health Working Group is available to provide technical assistance and guidance to state, local, territorial, and tribal jurisdictions managing companion animals diagnosed with SARS-CoV-2.

Although commercial laboratories may offer animal SARS-CoV-2 testing, confirmatory testing is only available through [USDA's National Veterinary Services Laboratories \(NVSL\)](#)  [USDA](#) is responsible for reporting any animal that tests positive for SARS-CoV-2 in the United States to the [World Organisation for Animal Health \(OIE\)](#) because [SARS-CoV-2 is an OIE-reportable disease](#). 

State Officials can reach the CDC COVID-19 One Health Working Group to set up a consultation by emailing onehealth@cdc.gov, or by calling CDC's Emergency Operations Center (24/7) at 770-488-7100, identifying yourself as a state public health veterinarian or state animal health official, and asking to speak to the on-call member of the CDC COVID-19 One Health Working Group.

Key Concepts

- This toolkit provides recommendations for public health and animal health officials managing companion animals diagnosed with SARS-CoV-2.
- At this time, there is no evidence that companion animals play a significant role in spreading SARS-CoV-2 to people.
- We are still learning about this virus; in some situations, people can spread the virus to animals. Further studies are needed to understand if and how different animals could be affected by the virus, and the role animals may play in the spread of COVID-19 to other animals and people.
- Close coordination between state and local health officials and the veterinary community will be important if a companion animal is suspected or tests positive for SARS-CoV-2. To protect people and animals and conserve resources, animals that do not require veterinary treatment or care should be isolated and monitored by their caretakers at home.
- Both the state public health veterinarian and/or state animal health official should be

informed of all animals that are being tested for SARS-CoV-2 within their jurisdiction, especially animals diagnosed with SARS-CoV-2, to ensure timely and coordinated response efforts when indicated.

- It is suggested that public health and animal health officials collaborate using a One Health approach to conduct epidemiological investigations for companion animals with SARS-CoV-2 infection. Early coordination and communication between state and federal animal and public health partners is encouraged.
- For the most up-to-date information, please see [Pets and Other Animals](#).

Definitions used in this toolkit

SARS-CoV-2 is the scientific name of the new strain of coronavirus. In people, the disease caused by the virus is called coronavirus disease 2019, or COVID-19. Because we are addressing the virus itself in the context of animal health, we refer to it as SARS-CoV-2.

Companion animals, in this document, refers to mammalian companion animals, such as dogs, cats, small mammal pets including ferrets and hamsters, and others that live in a home or on the premises of a home, including service animals.

Diagnosed animal refers to [animals with a presumptive or confirmed diagnosis of SARS-CoV-2](#)  .

State public health veterinarian, for the purposes of this document, refers to the [state public health veterinarian](#)   (SPHV) or designated public health official responsible for handling animal-related public health issues in their jurisdiction. Some jurisdictions do not have state public health veterinarians, or geographic, resource, or time limitations may prevent them from managing a situation involving an animal.

State animal health official, for the purposes of this document, refers to the [state animal health official](#)  responsible for animal disease control and eradication programs in their jurisdiction. Where possible, coordination, information-sharing, and decision-making between relevant partners, including the state public health veterinarian and state animal health official, is recommended.

Preparing & Planning for Test-Positive Animals

Toolkit checklist and guide

Note: First, ensure that necessary (not non-urgent) veterinary care is provided.

Prepare

- ✓ Identify facilities that are willing and able to care for test-positive animals
- ✓ Provide veterinary facilities with key messages for discussion with owners
- ✓ Prepare for multiple means of animal transportation between homes or facilities
- ✓ Assist animal organizations in securing equipment and resources
- ✓ As able, establish relations with and between One Health officials and agencies at all levels, including local, district, state, federal
- ✓ Establish bi-directional information flows between the SPHV, SAHO and veterinarians

Manage

- ✓ If not already done, encourage confirmatory testing by the USDA NVSL
- ✓ SPHV, SAHO, and attending veterinarian discuss management of a test-positive animal
 1. Advise on best practices for animals requiring in-patient care
 2. Advise on best practices and daily monitoring for animals isolated at home
- ✓ For animals moving between homes or facilities, ensure safe transport
- ✓ Consult, as needed, with CDC, USDA and other partners to determine if repeat testing is needed
- ✓ Consider conducting an epidemiologic investigation, coordinating with local, state and federal One Health partners

End Management

- ✓ Follow guidance for ending monitoring, isolation and movement restrictions
- ✓ If not yet done so, consider conducting an epidemiologic investigation, coordinating with local, state and federal One Health partners

Prepare for SARS-CoV-2 test-positive companion animals

Please see [Evaluating and testing companion animals for SARS-CoV-2 infection](#) for information to guide decision-making on whether a companion animal should be tested for SARS-CoV-2.

Close coordination between the state and local health officials and the veterinary community will be important if a companion animal is diagnosed with SARS-CoV-2, and early communication between state and federal partners is encouraged. The primary means of people becoming infected with SARS-CoV-2 is through person-to-person spread. Based on available science and information, the risk of companion animals spreading SARS-CoV-2 to people is considered to be low. **Therefore, necessary veterinary care for SARS-CoV-2 test-positive animals should not be withheld.**

State and local health officials may choose to apply this guidance to suspected or presumptive positive companion animals as appropriate to suit rapidly changing local circumstances.

Companion animals that are diagnosed with SARS-CoV-2 and require veterinary treatment or hospitalization may fall into one of several categories:

1. Routine medical care (e.g., vaccinations or boosters);
 - Where safe to do so, [non-urgent](#)  care should be postponed until the animal is cleared to [return to normal activity](#).
2. Medical care due to pre-existing conditions (e.g., ongoing chemotherapy treatment, monitoring for control of diabetes, worsening of an existing condition), and;
3. Physical injuries and other health conditions unrelated to SARS-CoV-2 (e.g., abscesses, lacerations, fractures).

The clinical spectrum of SARS-CoV-2 infection in animals remains largely undefined. Based on naturally occurring infection in companion animals to date, clinical signs likely to be compatible with SARS-CoV-2 infection in mammalian companion animals may include any of the following:

- Fever
- Coughing
- Difficulty breathing or shortness of breath
- Sneezing
- Lethargy
- Nasal discharge
- Ocular discharge
- Vomiting
- Diarrhea

In the event that an animal needs veterinary care, the state public health veterinarian and state animal health official should consider identifying veterinary facilities that are willing and able to care for test-positive animals. Veterinary facilities that are willing and

equipped to provide in-patient care to test-positive animals can be identified formally or informally.

Facilities caring for animals diagnosed with SARS-CoV-2 should have policies that align with the [NASPHV Compendium of Veterinary Standard Precautions for Zoonotic Disease Prevention in Veterinary Personnel](#) and should be familiar with the [American Veterinary Medical Association \(AVMA\) recommendations during the COVID-19 pandemic](#), which include infection prevention and control best practices for veterinary facilities.

Animals diagnosed with SARS-CoV-2 that develop illness requiring hospitalization may need to be transported between homes and veterinary facilities. It may be necessary to consider alternative options for transportation if an owner cannot transport their animal, including utilizing animal services, animal control, or an animal rescue team. These organizations should be prepared to handle a test-positive animal, which may involve developing policies and securing equipment and resources.

Considerations for Service Animals

In the event that a [service animal](#) is diagnosed with SARS-CoV-2, the recommendations for monitoring, isolation and movement restrictions should be handled based on the discretion of the attending veterinarian and the animal owners, in consultation with the state public health veterinarian and/or state animal health official.

For more information, see [Guidance for Handlers of Service and Therapy Animals](#). In accordance with the [Americans with Disabilities Act](#), service animals must be permitted to remain with their handlers.

Establish flow of information

Both the [state public health veterinarian](#) and the [state animal health official](#) should be informed of all animals that are being tested for SARS-CoV-2, and especially animals diagnosed with SARS-CoV-2, within their jurisdiction. The state public health veterinarian and state animal health official should encourage all presumptive positive test results be confirmed by USDA [NVSL](#), although they may decide to enact investigation and response measures based on suspected or presumptive positive test results from non-USDA NVSL laboratories. State public health veterinarians and/or state animal health officials should review local and state regulations regarding animal disease reporting and consider implementing SARS-CoV-2 reporting requirements where possible. Federal agencies including USDA and CDC should always be notified of presumptive positive test results, and early multisectoral communication and collaboration is encouraged.

The state public health veterinarian and state animal health official should consider providing treating veterinarians with guidelines and key messages to discuss with the owner. See suggested key messages in CDC's [Interim Guidance for Public Health Professionals Managing People With COVID-19 in Home Care and Isolation Who Have Pets or Other Animals](#).

Establish a plan with the treating veterinarian for SARS-CoV-2 test-positive companion animals

When an animal is diagnosed with SARS-CoV-2, a discussion should occur between the state public health veterinarian, state animal health official, and the treating veterinarian regarding continued care (if the animal is already hospitalized) at the veterinary facility, or the treating veterinarian's ability and/or desire to provide treatment to the animal in the event that it does need veterinary attention. If the animal is healthy or has mild illness, it can undergo isolation at home.

Considerations in this determination should include:

- Severity and complexity of illness in the animal;
- Animal health and welfare;
- [Risk of severe illness in the owner or caretaker](#), such as companion animals owned by older adults or those with serious underlying medical conditions;
- Whether the veterinarian can provide telemedicine consultation so that the animal can be examined and treated remotely;
- Availability and ability of the veterinarian and their clinic staff, to safely provide in-patient care and treatment for the animal;
- Where telemedicine and in-patient care are not possible, whether it is safe for the veterinarian to provide in-home care services (see [Interim infection prevention and control guidance for veterinary clinics treating companion animals during the COVID-19 response](#)); and
- Emotional wellbeing and mental health of the companion animal's owners.

There may also be situations where an owner is unable to provide care for a test-positive animal, requiring that the animal be surrendered temporarily (e.g., when the owner is hospitalized) or permanently. Please refer to [Interim recommendations for intake of companion animals from household where humans with COVID-19 are present](#)  for these instances, as the guidance provided therein is appropriate for companion animals exposed to human COVID-19 patients as well as companion animals that test-positive for SARS-CoV-2.

Managing Test-Positive Animals

When a SARS-CoV-2 test-positive companion animal requires hospitalization or in-patient care

In the event the current treating veterinarian is unable to provide care for the animal, the animal should be transferred to another veterinary facility that is appropriately equipped.

Best practices for transporting a sick, SARS-CoV-2 test-positive animal from a person's home, or from one veterinary facility to another, include:

- Under ideal conditions, the companion animal's owner or caretaker should transport their companion animal in a private vehicle to the veterinary facility.
- Owners or caretakers with suspected or confirmed COVID-19 should avoid transporting their companion animal to a veterinary facility, regardless of whether they are asymptomatic or sick. If an owner or caretaker has COVID-19 or is otherwise unable to transport their companion animal to the veterinary facility in a private vehicle, then best practices are to:
 - Arrange for a friend or family member from outside of their household to bring the animal to the veterinary facility, or to come pick up the animal and transport it to the new veterinary facility.
 - Alternatively, if curbside pick-up can be arranged by the receiving veterinary facility, then an ill person or a healthy household member may transport the animal, provided they wear a mask, maintain social distancing recommendations, and do not enter the premises.
 - If no other option is available, alternative recommendations are to arrange transportation (see below) in coordination with local authorities, such as animal services, animal control or an animal rescue team.
 - Animal handlers (who are not part of the animal's household) should be trained and prepared to implement their biosafety procedures for infectious diseases when transporting companion animals. These should include infection prevention measures, social distancing, and use of appropriate PPE.
 - If the animal handlers must pick up the companion animal from the home and there are people in the household with suspected or confirmed COVID-19, a healthy member of the household should bring the animal outside while wearing a mask. Animal handlers should only enter the house when absolutely necessary.
 - If the animal handler must enter the house, as few personnel as possible should enter the premises to prepare the animal for transportation:
 - Ask the ill person to confine themselves to a separate room while the animal handler performs the necessary tasks to care for the animal or retrieve it from the household. If this is not possible, ask the ill person to wear a mask that covers their mouth and nose, or;
 - Maintain a distance of at least 6 feet from any household members while in the house. The person going into the house should wear a single pair of disposable gloves, a NIOSH-approved N95 or higher-level respirator (or facemask if a respirator is not available), eye protection, and outerwear if in the same room with the ill person if it is not possible to maintain a distance of 6 feet;
 - [Wash hands](#) after handling the animal, touching household surfaces, and interacting with members of the household. If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of the hands and rub them together until they feel dry. If gloves are worn, perform hand hygiene after removing them;
 - Avoid touching eyes, nose, and mouth until after hands have been cleaned.
- Medium and large dogs should be leashed, and smaller animals, such as small dogs, cats, and ferrets, should be placed in a secure carrier. When possible, animals should be transported in species-appropriate, single-use cardboard carriers or hard-shelled animal carriers that can be cleaned and disinfected with an [EPA-registered](#)

[disinfectant](#)  after transport.

- Ensure [cleaning and disinfection](#) guidelines are followed, and that workers performing these duties are protected from chemical hazards.
- Only the animal and necessary equipment should be removed from the premises. Non-essential items such as food (unless the animal is on a specialized diet), dishes, bedding, clothing, toys, or other items from the home should not accompany the animal.
- Animal transport should occur in a vehicle that has an area that can be covered and [cleaned and disinfected](#) and is closed off from driver when possible.
- Any item (collar, leash, etc.) that arrives at the veterinary facility with the animal should be [washed](#) or disinfected. Disinfect bowls, toys, and other animal care items with an [EPA-registered disinfectant](#)  and rinse thoroughly with clean water afterwards.
- There is no evidence that SARS-CoV-2 can spread to people from the skin, fur, or hair of pets. Therefore, additional measures to disinfect the animal, such as bathing, are not necessary.

Treating a sick, SARS-CoV-2 test-positive animal

The infection prevention and control best practices involved with caring for a test-positive companion animal are likely to be regularly implemented at most veterinary facilities regardless of ongoing outbreaks of infectious diseases. However, these are especially important during an outbreak of an emerging infectious disease, such as COVID-19.

Veterinary facilities should have:

- A separate, designated area where SARS-CoV-2 positive animals can be isolated from the rest of the patient population.
 - A planned route for moving the animal from the transport vehicle to an isolation space.
 - Where possible, only SARS-CoV-2 animals being evaluated and treated should be housed in this isolation space.
 - Space for veterinary personnel to [don and doff PPE](#) prior to entering the room, and immediately upon exiting. Alcohol-based hand rub, or a sink with soap and water should be easily accessible.
- Availability of an adequate amount of appropriate PPE for the projected duration of hospitalization.
- Plans for limiting the number of veterinary personnel that have contact with the animal.
- Logs of all personnel that have had contact with the animal for occupational health monitoring.
 - Animal caretaker logs should include name of individual(s) interacting with the animal, date, and time the animal was attended, and the type of care provided (e.g., feeding, cleaning, medications, body temperature, pulse rate, respiration rate, procedure etc.).
- Ability to clean and disinfect the isolation area with [EPA-registered disinfectants](#)  .
- Plans for safely exercising and enriching animals, as needed.
 - Dogs may be walked on leash in an area that is ideally separated from areas

used by other people or animals.

- Plans for [safe handling and disposal of animal waste](#) until the animal is cleared to return to normal activity.
- Rules to limit or prohibit visitors and additional human traffic in the area(s) where sick, test-positive companion animals are being housed and treated.

See [Interim Infection Prevention and Control Guidance for Veterinary Clinics During the COVID-19 Response](#) for more information.

PPE guidelines

It is important that veterinary personnel be trained on the use of PPE, including how to properly don (put on) and doff (take off) PPE. However, veterinary personnel should work with public health colleagues and CDC to stay informed on use and availability of PPE. Veterinarians should be aware of the current shortage of PPE due to the high demand for PPE in human healthcare settings. Veterinarians should consider their current PPE supply, rate of PPE use, and review [Strategies for Optimizing the Supply of PPE](#).

- CDC's [PPE burn rate calculator](#) is a spreadsheet-based model or app that provides information for healthcare facilities to plan and optimize the use of PPE.
- CDC's [Interim Infection Prevention and Control Guidance for Veterinary Clinics During the COVID-19 Response](#) has PPE recommendations, including recommendations for PPE extended use and reuse, for veterinarians and clinic staff.
- AVMA provides guidelines for [PPE use during the COVID-19 pandemic when demand exceeds supply](#). [↗](#)

Given current limitations in knowledge regarding COVID-19 and companion animals, these PPE guidelines use a cautious approach. Recommendations may change over time, as new information becomes available.

- Veterinarians and their staff should review the concepts in [NASPHV Compendium of Veterinary Standard Precautions for Zoonotic Disease Prevention in Veterinary Personnel](#) [↗](#). This document outlines routine infection prevention practices designed to minimize transmission of zoonotic pathogens from animals to veterinary personnel regardless of ongoing outbreaks of infectious diseases but are especially important during an outbreak of an emerging infectious disease such as COVID-19.

Recommended Personal Protective Equipment (PPE) Based on Companion Animal History

Animal History	Facemask	Facial Protection (face shield, goggles)	Gloves	Protective Outerwear (gown or coveralls ¹)	N95 Respirator or suitable alternative ²

Non-aerosol generating procedure on a SARS-CoV-2 test-positive animal	N	Y	Y	Y	Y
Aerosol-generating procedure on a SARS-CoV-2 test-positive animal ³	N	Y	Y	Y	Y

¹ Reusable (i.e., washable) gowns are typically made of polyester or polyester-cotton fabrics. Gowns of these fabrics can be safely laundered according to routine procedures and reused.

²Respiratory protection that is at least as protective as a fit-tested NIOSH-certified disposable N95 filtering facepiece respirator is best practice. However, if an N95 or other respirator is not available, use a combination of a surgical mask and a full-face shield.

- Please see [Proper N95 Respirator Use for Respiratory Protection Preparedness](#)
- Please see [CDC’s recommendations for alternatives for N95 respirators](#),_
- Respirator use should be in the context of a complete respiratory protection program in accordance with [OSHA Respiratory Protection standard \(29 CFR 1910.134 !\[\]\(f0fdb60b777eb11b66cba545acf146fa_img.jpg\) \)](#), which includes medical evaluations, training, and fit testing.

³Aerosol-generating procedures, such as suction or bronchoscopy, should be avoided, if possible, on any animals that are test-positive for SARS-CoV-2.

When a SARS-CoV-2 test-positive animal can be isolated at home

Companion animals that do not require hospitalization can be returned to their caretakers to undergo home isolation. See [What to Do if Your Pet Tests Positive for the Virus that Causes COVID-19](#), which has recommendations for owners of test-positive animals; the state public health veterinarian and state animal health official may recommend that owners adhere to this guidance.

A protocol for home isolation applies to all animals that are test-positive and do not require hospitalization. This protocol involves daily monitoring, isolation recommendations, and movement restrictions.

Daily monitoring

Companion animals that are confirmed to be positive for SARS-CoV-2 and can be isolated at home should be monitored daily by the owner/household members for [signs of illness](#).

If a SARS-CoV-2 test-positive companion animal develops new or worsening symptoms, the owner should inform the treating veterinarian and arrange for the animal to be transported to their veterinary facility or to another previously identified veterinary facility

that can provide appropriate care. The treating veterinarian should also inform the state public health veterinarian and state animal health official of the animal's status, whereabouts, and treatment/care plan.

Isolation recommendations

For the duration of isolation, have the companion animal stay in a designated "sick room" if possible, or otherwise be separated from people and other animals. This is the same way a [COVID-19 positive person would separate from others in their household](#).

Although there is no evidence that companion animals can transmit SARS-CoV-2 to humans, these precautions are recommended out of an abundance of caution until more is known about virus transmission. CDC provides [recommendations on how to limit interaction with the isolated companion animal](#) as much as possible.

Regardless of whether the household member has been sick with suspected or confirmed COVID-19, [household members that are providing care for an isolated companion animal should protect themselves](#) and follow CDC's [cleaning and disinfecting recommendations](#).

Based on currently available information and clinical expertise, some people may have an [increased risk for severe illness](#) from COVID-19. Based on what we know at this time, **pregnant people might be at an increased risk for severe illness from COVID-19** compared to non-pregnant people. Additionally, there may be an increased risk of adverse pregnancy outcomes, such as preterm birth, among pregnant people with COVID-19. Where possible, people with an increased risk of severe illness should avoid caring for animals that are test-positive for SARS-CoV-2.

Movement restrictions

Below are activities that should be avoided until the companion animal is cleared to return to normal activities:

- Walks outside (except when unavoidable for elimination);
- Visits to veterinary facilities, without prior consultation with the treating veterinarian;
- Visits to human healthcare facilities, long-term care facilities, schools, or daycares;
- Visits to parks (including dog parks), markets, or other gatherings such as festivals;
- Visits to the groomer, including mobile grooming salons;
- Visits to pet daycares or boarding facilities;
- Serving as a therapy animal; and
- Other outings such as playdates, hikes, or visiting other homes or stores.

Repeat testing of a SARS-CoV-2 test-positive companion animal

Where deemed appropriate, repeat testing of companion animals for SARS-CoV-2 should be conducted in [coordination with the state public health veterinarian and state animal health official](#). [Federal partners, including CDC and USDA](#) [\[link\]](#), should be consulted as

relevant.

End management of test-positive animals

When to resume normal activities with a SARS-CoV-2 test-positive companion animal

Monitoring, isolation, and movement restrictions for companion animals (either hospitalized or isolated at home) diagnosed with SARS-CoV-2 can end under the following conditions.

If the companion animal is test-positive for SARS-CoV-2, monitoring, isolation, and movement restrictions can end if these conditions are met:

- The animal has not shown clinical signs consistent with SARS-CoV-2 infection for at least 72 hours without medical management;

AND one of the following conditions:

- It has been at least 14 days since their last positive test from a lab that uses a validated SARS-CoV-2 RT-PCR diagnostic assay;

OR

- All sample types collected at follow-up are negative by a validated SARS-CoV-2 RT PCR diagnostic assay.

Epidemiological investigation of SARS-CoV-2 test-positive companion animals

At this time, the risk of companion animals, including pets, spreading SARS-CoV-2 to people is considered to be low. However, understanding the epidemiological context of the case including human-animal interactions is important to furthering our understanding of how this virus may circulate and transmit under natural conditions, which is necessary to inform public health and animal health measures. Investigations for animal cases that meet [CDC's criteria for SARS-CoV-2 testing](#) may be particularly valuable for understanding this epidemiological context. **Ideally, epidemiological investigations should be jointly conducted between local, state, and federal One Health partners. Investigation should begin when the case is identified to ensure expedient public health recommendations are issued.** Investigation guidance will continue to be updated based on the most recent scientific information.

When a companion animal tests positive for SARS-CoV-2, an epidemiological assessment should be considered. This assessment should include the following components:

- Description of the diagnostic and clinical factors used to make the case

determination;

- Assessment of risk factors in the test-positive animal, including potential source of infection;
- Evaluation of potentially exposed animals; and
- Evaluation of potentially exposed persons.

Please contact CDC's COVID-19 One Health Working Group at onehealth@cdc.gov for additional guidance and resources on conducting an epidemiological investigation.

At this time there are no additional precautions recommended for persons or animals with potential contact to test-positive animals, aside from animal caretakers. Identifying potential contacts (human or animal) and documenting their health status could help inform the public health risk of these zoonotic SARS-CoV-2 events. Should the risk associated with case-positive animal contacts change, additional precautions may be indicated.

CDC's up-to-date information on COVID-19

- [CDC's Homepage for Coronavirus \(COVID-19\)](#)
- [COVID-19 and Pets](#)
- [What to Do if Your Pet Tests Positive for the Virus that Causes COVID-19](#)
- [COVID-19 and Animals](#)
- [COVID-19 and Animals FAQs](#)
- [Interim Infection Prevention and Control Guidance for Veterinary Clinics Treating Companion Animals During the COVID-19 Response](#)
- [Evaluation for SARS-CoV-2 Testing in Animals](#)
- [Healthy Pets, Healthy People Website](#)

Additional information

- [USDA SARS-CoV-2 Case Definition](#)  
- [FDA Vet-LIRN SARS-CoV-2 Supplemental Necropsy Sample Inventory Checklist](#) 
- [USDA APHIS One Health Website](#)  (with information on how to submit samples for confirmatory diagnostic testing at [USDA NVSL](#) )
- [NASPHV Compendium of Veterinary Standard Precautions for Zoonotic Disease Prevention in Veterinary Personnel](#) 
- [AVMA COVID-19 Resources](#) 
- [World Health Organization \(WHO\) Website](#) 
- [World Organisation for Animal Health \(OIE\) Q & A Website](#) 

Publications and Other Guidance

Benedict, K. M., et al. (2008). "Characteristics of biosecurity and infection control programs at veterinary teaching hospitals." *J Am Vet Med Assoc* 233(5): 767-773.
<https://www.ncbi.nlm.nih.gov/pubmed/18764716> 

Wright, J. G., et al. (2008). "Infection control practices and zoonotic disease risks among veterinarians in the United States." *J Am Vet Med Assoc* 232(12): 1863-1872.
<https://www.ncbi.nlm.nih.gov/pubmed/18598158> 

Spengler, J. R., et al. (2015). "Management of a pet dog after exposure to a human patient with Ebola virus disease." *J Am Vet Med Assoc* 247(5): 531-538.
<https://avmajournals.avma.org/doi/full/10.2460/javma.247.5.531> 

Last Updated Nov. 5, 2020

Content source: National Center for Immunization and Respiratory Diseases (NCIRD), Division of Viral Diseases